

This invention provides a rotating electric machine using an inner section of a slot of a stator as a cooling passage and allowing a high cooling efficiency. Furthermore, it provides a manufacture method for the rotating electric machine which allows streamlining of the manufacture of the cooling passage. A plate is attached to the plate retaining groove formed in proximity to the opening of the slot of the stator. A resin layer is formed by injection of resin into a space formed between the outer face of the plate and the mold set on an inner peripheral face of the stator. The plate is pressed by the injection pressure of the resin to come into close contact with the stopper and to create a seal which prevents leakage of resin into the slot. A leg is provided on the plate and extends into the slot for reducing the cross sectional surface area of the cooling passage